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ABSTRACT

This document is a monograph in a personnel development series addressing issues that are pertinent for policy-making personnel concerned with program evaluation and personnel preparation. The major intent of the monograph is to present a variety of evaluation practices and procedures used in the evolution of a vocational/special education personnel preparation program. As a means of illustrating and discussing the major evaluation points in a program, a three-phase view of program evaluation is delineated. Section 1 considers planning evaluation (determining program goals and selecting the program strategy). Section 2 describes process evaluation focusing on the implementation aspects of a program. Three case examples describe evaluation activities conducted for a short-term workshop, a course, and an inservice project. Section 3 examines impact evaluation that looks at the outcomes and effects of a program on its graduates and their respective work environments. Two case examples of impact evaluation designs in vocational/special education personnel preparation projects are highlighted. A final section suggests procedures and guidelines to increase use of evaluation findings. (YLB)

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Vocational Education for the Handicapped: Perspectives on Program Evaluation

Personnel Development Series: Document 4

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May 1982

FOREWORD

Over the past decade the problems and difficulties that face handicapped youth in their efforts to obtain and maintain employment have been widely documented by researchers, public policy analysts, and advocacy organizations. In the 1970s the U.S. Congress enacted several pieces of education, training, and employment legislation to focus, in part, on resolving these problems. The Education for All Handicapped Children Act of 1975, along with the Vocational Education Amendments of 1976, the Comprehensive Employment and Training Act of 1978, and several civil rights initiatives, placed priority upon assuring that handicapped youth receive appropriate vocational education programs and services. These various pieces of legislation acknowledged the concurrent need for staff development and teacher education programs to assure that effective programs and services are delivered. Within the vocational education, special education, rehabilitation, and CETA systems there are nearly a million professionals--the vast majority of whom have limited or no expertise in planning and providing comprehensive vocational programs and services for disabled youth and adults. The need for training programs to update teachers, support personnel, counselors, coordinators, and administrators is great. There is also an enormous need for training other individuals (such as employers, parents, advocates, co-workers, non-disabled peers) if youths with special needs are to be successful in their transition from school to work.

Planning and conducting effective personnel development programs that serve the career development needs of handicapped youth involves a variety of complex tasks. Developing appropriate interagency, collaborative training arrangements is essential to insure that current knowledge and expertise is

utilized from the fields of vocational education, special education, rehabilitation, career development, and employment and training. Decisions must be made relative to the specific training needs of the target audience. Frequently, the needs of inservice practitioners must be considered along with the needs of trainees who are preparing to enter the field for the first time. The question of student needs is also present. The process of providing vocational education for severely handicapped youths is, by nature of the students served and the training technology, considerably different from training mildly handicapped youth. Other critical dimensions related to the content of personnel development encompass such areas as: vocational assessment, career guidance, and evaluation of training programs. The need for and patterns of personnel certification in the field of vocational/special education is also a continuing concern for personnel development programs.

During 1980-82 the University of Illinois hosted a series of three conferences which focused upon improving personnel preparation programs in vocational/special education. These conferences were conducted as part of the Leadership Training Institute/Vocational and Special Education, which was supported by a grant from the Division of Personnel Preparation, Special Education Programs, U.S. Department of Education. As individuals responsible for personnel preparation programs in vocational/ special education met and shared their experiences and concerns, a clear need emerged for a series of monographs on designing, implementing, and evaluating personnel development programs. The need to address the critical questions and identify effective policies and practices related to personnel development was obvious following the initial conference held in Champaign, Illinois in April 1980. The project staff used a small advisory group of individuals attending the conferences to outline the Perspectives monograph series. Needs assessment data

collected during and prior to the first conference was used by the group in identifying the major topics to be addressed in the series. Staff involved in the vocational/career education projects funded by the Division of Personnel Preparation were then invited to become members of the various monograph writing teams. Under the expert guidance of Dr. Janet Treichel, LTI Training and Dissemination Coordinator, the writing teams formulated their monographs to focus on such core components as: present state-of-the-art, effective policies and practices, and guidelines for personnel development programs. Dr. Treichel coordinated the planning and preparation of the series in a highly exemplary manner. Her leadership, commitment to excellence, and professional insight were valuable assets in editing this series.

The monograph topics in the Perspectives on Personnel Development series include: Special Populations/Severely and Moderately Handicapped, Certification, Program Evaluation, Effective Interagency/Interdepartmental Coordination, Inservice Personnel Development, Vocational Assessment, Preservice Personnel Preparation, and Career Development/Guidance.

We anticipate that the monographs will be useful resource documents for a variety of audiences. Teacher educators and administrators in higher education will find the series helpful in planning both preservice and inservice programs for special educators, vocational educators, counselors, educational administrators, rehabilitation specialists, and others. State education agencies involved in certification, personnel development, and program administration will find strategies, and suggestions for reviewing, evaluating, and formulating teacher training efforts in local agencies and universities. The monographs are also a rich source of ideas for parent and advocacy groups and professional associations as they seek to improve the knowledge and competence of personnel serving handicapped youth.

This series represents a significant compilation of important and timely perspectives on personnel development in vocational/special education. It contains the wisdom and insight of nearly 50 leaders in the field. We feel it will be a valuable and important resource in improving the "appropriateness" of the programs and services received by the handicapped youths of our nation.

L. Allen Phelps
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Leadership Training Institute/
Vocational and Special Education

George Hagerty
Project Officer
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PREFACE

The Perspectives on Personnel Development series has become a reality due to the efforts of a number of individuals. These people were highly instrumental in the development, planning, and publication phases of the monographs.

Appreciation and gratitude is extended posthumously to Margaret (Meg) Hensel. Meg was actively involved in assisting in planning for the personnel preparation conferences and the initial developmental stages for this series. We will continue to miss her enthusiasm and dedicated efforts.

The LTI is indebted to Drs. Leonard Albright, University of Vermont, and Geraldine Markel, University of Michigan, for their excellent work in developing this monograph. This document addresses a number of issues that are pertinent for policy-making personnel concerned with program evaluation and personnel preparation.

The reviewers for the Perspectives series also made important and significant contributions. Dr. Gary Clark of the University of Kansas reviewed each monograph in the series. Dr. Robert Brinkerhoff of Western Michigan University and Dr. Dave Pucel of the University of Minnesota served as reviewers for the Perspectives on Program Evaluation monograph. Their insightful comments and suggestions were very helpful in the preparation of the monograph.

Sincere appreciation is expressed to Ms. Alicia Bollman, Ms. Nancy Verbout, and Ms. June Chambliss for their dedicated efforts and patience in providing the secretarial expertise necessary to produce this volume.

Janet Treichel, Editor
Coordinator, Training and Dissemination
Leadership Training Institute/
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The role of program evaluation in the vocational/special education personnel preparation process has increased significantly, due mainly to two influential developments affecting the field. First, the relatively recent expansion of training programs in vocational/special education has generated greater professional interest in the processes and outcomes of program evaluation in this area. Such information should, for example, be useful to program developers in determining the efficiency of their efforts and also keep them current with effective programs and practices across the country. Secondly, the tightening of fiscal resources at federal and state levels will likely result in keener competition for shrinking program support funds. Consequently, the decision makers in these funding agencies may place an even greater emphasis on program effectiveness information. The collection and reporting of such information to these decision makers could hold special significance during this "do more with less" fiscal era.

The major intent of this monograph is to present a variety of evaluation practices and procedures used in the evolution of a vocational/special education personnel preparation program. As a means of illustrating and discussing the major evaluation points in a program, a three-phase view of program evaluation is delineated. The three phases are:

1. Planning evaluation, which is concerned with program design considerations;
2. Process evaluation, which focuses on implementation aspects of a program; and
3. Impact evaluation, which looks at the influence of the program on its graduates and their respective work environments.

This three-phase conceptualization of program evaluation is hardly a novel creation. Similar conceptual presentations have appeared in the literature, particularly within the past five years (e.g., Stufflebeam et al., 1971; Phelps & Wentling, 1977; Morris & Fitz-Gibbon, 1978; Brinkerhoff, 1980; Russo, 1980).

The following descriptions of each of the three program evaluation phases will provide the reader with information relative to these questions:

1. What are the purposes of this type of evaluation?
2. At what point does this type of evaluation typically occur in a program?
3. What are some example evaluation strategies used within this phase?
4. What sources could I explore to obtain additional information on the particular idea expressed or example given?

While each phase is treated in a separate manner, the underlying premise of this paper is that evaluation is pervasive and ongoing, permeating all components of the personnel preparation program (Sanders & Cunningham, 1974; Skrtic, Knowlton, & Clark, 1979).

Program evaluation is also a responsive activity, seeking to discern and accommodate the information needs of its audiences. By maintaining a responsive posture, the evaluation is of greater use to and more likely to be used by members of its audiences. This theme receives additional attention in the latter portion of this document.

Phase I: Planning Evaluation

Planning evaluation involves the identification and selection of program goals and strategies. More specifically, the primary purposes of the planning evaluation phase are: (a) to determine the proper goals of a personnel preparation program, and (b) to help in selecting the most appropriate strategy for achieving these goals (Brinkerhoff, 1980).

Determining Program Goals

The first purpose of the planning evaluation phase, determining the proper program goals, is accomplished by analyzing the needs of the prospective training audience. For many preservice and inservice personnel preparation programs, especially beginning ones, the analysis has been done via the competency identification route (e.g., Brolin & Thomas, 1972; Krantz & Weatherman, 1976). In a review of 12 vocational/special education competency studies, Albright (1978) noted that nearly all utilized a role analysis procedure for determining teacher competencies. This procedure essentially consisted of the following steps:

> -- Project staff and expert jury members review/select/edit competency statements from existing lists; additional competency statements may be suggested by the reviewers;
>
> -- A list of competencies is synthesized and categorized through a consensus process;
>
> -- Project staff designs a questionnaire, which includes a listing of competencies and a rating scale for judging the relative importance or criticality of each competency statement (other variables, such as frequency of use and need for additional training are sometimes included); and
>
> -- The questionnaire is distributed to practitioners. (pp. 21-22)

A more recent example of this competency identification procedure appears in a final project report by VanNest and Barnhart (1980) who used the procedure in developing a preservice curriculum for industrial and special education personnel at Kean College in New Jersey.

A second technique for analyzing needs, one that has recently gained prominence in light of intensified efforts in providing inservice in the vocational/special education area, is the needs assessment approach. While quite similar to the competency identification approach, the needs assessment process tends to be more focused in terms of its target audience, purpose, and information scope. The needs assessment emphasizes identification and selection of inservice teacher training needs on the basis of highest priority order. A more global description of the needs assessment process has been provided by Kaufman and English (1979):

> ... the formal harvesting, collection and listing of needs, placing the needs in priority order and selecting the needs of highest priority for action. The process includes the partners in planning, which in education are the learners, the implementers and the society. It requires that there is a consensus of the partners in the prioritization of needs and it strongly urges that the process include any additional external referent of survival and contribution when determining need priorities. (pp. 343-344)

The following is a sampling of vocational/special education inservice needs assessment studies conducted at a variety of levels.

Statewide: In terms of assessing teacher program needs on a statewide basis, the studies conducted by Hughes (1978), Greenwood and Morley (1977), and Yung et al. (1978) are often cited in the literature. The data collection procedure used in these studies was a mail survey instrument sent to vocational education personnel in the respective states (North Carolina, Iowa, and Arkansas).

University: Using a self-rated needs assessment instrument developed by Phelps (1976) as one data collection source, Wentling and associates (1978) reported on the formative evaluation techniques employed in the development of a vocational special needs course. In their final project report, Peak and Brown (1980) presented the conceptualization, design, and pilot testing of a needs assessment survey instrument in selected secondary and post-secondary vocational schools in Minnesota.

Local: Regan and Deshler (1980) described the use of local steering committees in conducting building-level needs assessment surveys as a major component of their inservice project. Mori (n.d.) utilized a survey instrument for collecting needs data from local district personnel.

Most example needs assessment activities mentioned in the preceding paragraphs have used survey instruments to collect needs data. As suggested by Kuh (1980), personnel doing needs assessments should consider including multiple data collection techniques. He stated:

> Many needs assessment teams continue to rely on the district or building survey to document needs. There is no question that surveys can be effective and particularly efficient forms of gathering information from a large number of people. But a survey alone cannot document need. In practice, most needs assessments will probably include some form of survey as one component of the data collection process. Most agree that information such as interviews, open forums, and documentation or use of existing records are likely to increase the reliability and validity of the process. Multiple measures will improve the chances that the needs identified during the process are indeed legitimate, and should be attended to by program planners. (p. 10)

The descriptions of the vocational/special education studies and practices cited thus far have emphasized the collection of needs information from the

prospective training audience (e.g., teachers). While the prospective training audience is indeed a primary data source for determining program goals, multiple audiences are likely to be involved in or affected by a personnel preparation program (e.g., program staff, trainers, trainees, agent(s) from external funding source(s)). Therefore, these audiences should be identified and included in the process of goal identification and selection. The reader should find the utility standards and guidelines offered in the Standards for Evaluations of Educational Programs, Projects and Materials by the Joint Committee on Standards for Educational Evaluation (1981) to be helpful in identifying program audiences and for collecting information that is responsive to the needs and interests of these audiences. For more comprehensive and indepth treatments of this information, the works of Patton (1978, Chapters 5 & 6; 1980, Part II, Chapters 6 & 7) and Guba and Lincoln (1981, Chapters 2 & 10) are recommended. In addition, Guba and Lincoln (1981) provide a very useful review of the problems associated with attempting to define needs in contemporary needs assessment approaches.

In a chapter on strategies for planning and conducting an inservice needs assessment, Davis (1980) provided a checklist of activities to be completed. A slightly adapted version of this checklist is shown in Figure 1. Of particular note is the emphasis on needs assessment as a continuous process, occurring before, during, and following the delivery of the inservice program.

Figure 1

A Checklist of Activities For Steps in the Needs Assessment Process

1. State Concerns

___ Identify concerns (problems that suggest a need for inservice training).
___ Identify target population (individual or group).

2. Identify People and Roles

___ Determine who will manage the needs assessment.
___ Select needs assessment planning team. (Include representative(s) from target audience.)
___ Identify those who will conduct the assessment.

3. Plan the Needs Assessment Data Collection

___ Develop a working definition of "needs".
___ Determine needs assessment goals.
___ Determine needs assessment data collection strategies.
___ Determine and obtain resources required for needs assessment.
___ Develop data collection plan and time line.

4. Implement the Needs Assessment Data Collection

___ Develop instrumentation and recording procedures.
___ Field test and validate instruments and procedures.
___ Collect needs assessment data.
___ Tabulate data collected and summarize results.
___ Report to planning team. Planning team interprets and judges results.

5. Disseminate Results and Set Priorities

___ Disseminate results of needs assessment to respondents and interested constituencies.
___ Prioritize needs for training.
___ Determine feasibility of meeting the needs and select prioritized needs for training.

6. Design the Inservice Program

____ Identify the target audience.
____ Identify needs to be satisfied.
____ Select training or activity to be offered to satisfy the need.
____ Identify who will be responsible for each activity.
____ Identify resources needed to accomplish the task, including incentives to be offered to training participants.
____ Identify how progress and accomplishments will be assessed.

7. Continue to Assess Needs

____ Determine strategies for continuous assessment during conduct of training program.
____ Reassess needs when program has been completed.
____ Evaluate progress and accomplishments.

Adapted from Davis (1980), p. 16.

Selecting the Program Strategy

The second purpose of the planning evaluation phase is to help in selecting the most appropriate strategy for addressing the identified needs and goals. Procedures for developing the "best" program strategy could range from a full-scale feasibility study to a two-hour meeting with a program board. Other potential procedures have been suggested by Brinkerhoff (1980):

1. Critical reviews of literature, journals, reports, texts, proposals, etc.--to learn about the history of efforts mounted to deal with goals similar to those to be pursued;

2. Two-phase studies which first would survey pertinent literature or other sources to assemble a "catalog" of previously conducted program designs and approaches to dealing with similar goals. These alternative strategies would then be evaluated one against the other, or against a set of criteria, to determine their comparative strengths and weaknesses, or to rank-order them;

3. Site visits to (or other kinds of contact with) operating programs addressing goals similar to the goals to be pursued;

4. Surveys of experts--practitioners and theoreticians--to glean their ideas, views, and opinions concerning successful program strategies;

5. Convening of "advocate teams", each assigned to develop a program that could operate within a given set of resources and could meet a given set of criteria. The program designs produced by these teams are then evaluated by a judge, or panel of judges, to select a "winner"; and

6. Convening of meetings, conferences, and public "hearings" to review and critique certain program alternatives, a given single program, or particular aspects of programs under consideration. (pp. 35-36)

The listing of the above procedures in a separate manner does not necessarily imply that a single procedure is recommended. In practice, the authors have observed several training programs that used a combination of related literature review, site visits to similar programs, surveys, and discussions with experts and feedback from program advisory members for planning evaluation purposes.

The planning evaluation activities noted in this section are most visible in the beginning stages of a new program, when staff efforts are heavily focused on program design matters. Yet, these activities should also be present, but perhaps less apparent, in the ongoing operation of a personnel preparation program.

Phase II: Process Evaluation

Process evaluation occurs during the implementation stages of a personnel preparation program, seeking to answer the basic question, "How are we doing in getting there?" (Wentling, 1980). It involves collecting and sharing information for program improvement purposes. The particular focus and purposes of this type of evaluation will depend on the maturity of the program and the information needs of the audiences for the evaluation. However, the greatest payoff of process evaluation, particularly for new programs, is that problem areas are identified along the way and corrective measures can be taken almost immediately.

To illustrate the varying uses of and approaches to process evaluation in the teacher education context, three case examples are offered here. These examples describe evaluation activities conducted for a short-term workshop, a course, and an inservice project.

Short-Term Workshop

A framework for evaluating the effectiveness of short-term workshops has been conceived and used by Knowlton (1980). His framework includes "targets across three evaluative conditions: (a) pre-post session, (b) within session, and (c) follow-up" (p. 60). The "within session" condition focuses on evaluative activities conducted during workshop delivery. Knowlton suggests the evaluative data obtained during a short-term workshop be generated from:

-- Probes of participant proficiency relative to knowledge and performance;

-- Participant reactions to critical logistic factors (e.g., instructional materials, media); and

-- Direct observation of participant attention to workshop delivery. (p. 61)

He also advocates the use of a variety of measures for collecting effectiveness data, such as paper and pencil surveys, direct observation procedures, and participant interviews.

Course Development

An evaluation of a newly developed special/vocational education course, offered through the University of Vermont's "Careers" inservice project (Hasazi, 1980), was conducted by an external consultant. This consultant, or external evaluator, summarized the intent of the evaluation procedure: (Center for Evaluation and Policy Research, n.d.)

> The entire procedure was an open dialogue between the evaluator and the instructors. The evaluator sought information applicable to the needs of the instructors for developing, teaching, and modifying the course. For this reason a combination of participant observation, evaluation questionnaires, and telephone interviews were used to gather information.

Descriptions of the three data gathering techniques were also prepared by the external evaluator: (Center for Evaluation and Policy Research, n.d.)

1. Participant Observation. As a participant observer, the evaluator attended the first or second class, the eighth class, and the last class (#15) of each semester. The participant observer took notes on the content of the course as well as the students' actions. Their attentiveness (body language), actions, and comments were noted along with the environmental conditions of the classroom. During the break the observer talked with class members and obtained information on their satisfaction with the course. These notes were not shared with the instructors directly, though they were discussed in general terms with them after each visited class.

2. Midterm and Final Course Evaluation Questionnaire. Evaluation forms were developed with input from the course instructors. Questions the instructors were curious or concerned about were included in the evaluation. For example, the instructors were very interested in knowing what the participants thought about using three instructors to teach the course. As a result, the question was

included on the evaluation form. The results of the evaluations were reported in median scores with participant comments listed. The reports were then shared with the instructors.

3. Follow-up Phone Calls. Based on the information obtained from the evaluations, the instructors felt that two or three questions merited further research. Three or four course participants' names were randomly selected and called at their place of employment. He/she was asked to elaborate on the questions the instructors requested more information about. These answers were kept confidential and written up in a follow-up phone call report which was then shared with the instructors.

Inservice Project

In an inservice project at the University of Kansas, Skrtic et al. (1981) were involved in training teams of vocational and special educators to become inservice providers in their respective school districts. The implementation phase of this project consisted of two parts. First, the team members received training via a two course sequence which took place during Spring and Summer 1980. Second, the trained team members then delivered "needs-based, district-specific inservice programs" (p. 9) to their peers during the 1980-1981 school year. Data were collected from five sources to determine the extent to which the teachers in training were acquiring the skills necessary to be inservice providers. These data sources were:

1. Staff observations during training sessions;
2. Staff review of inservice products developed by the trainees;
3. Formative evaluation comments made by the trainees;
4. Comparisons of final examinations with pretests; and
5. Project staff and audience evaluations of delivered inservice programs by trainees. (p. 34)

Interestingly, in their pretesting of the teacher-in-training group, Skrtic and his colleagues found that "few had even an awareness of needs assessment

and evaluation principles" (p. 34). In reviewing their description of the training components and the follow-up technical assistance provided by the project staff, it was evident that the evaluation area was an important component of the training program.

A quote from Stufflebeam et al. (1971) summarizes the intent of process evaluation and its potential benefits:

> ... under process evaluation, information is delineated, obtained, and reported as often as project personnel require such information, daily if necessary--especially during the early stages of a project. This provides project decision makers not only with information needed for anticipating and overcoming procedural difficulties but also with a record of process information for interpreting project attainments. (p. 232)

Phase III: Impact Evaluation

Impact evaluation occurs following the trainee's exit from the program and entry or re-entry into employment. This third phase of program evaluation examines the outcomes and effects of a program, focusing on two central and closely related questions: (Brethower & Rummler, 1977)

1. Are the concepts and skills taught in the program being used by the graduate in the workplace?
2. Does application of these concepts and skills positively affect the work environment?

The emphasis here is on changes in the graduate's performance as well as impacts on the workplace. Has, for example, the graduate who received training on delivering inservice education initiated an inservice effort at the local level (Phelps & McCormick, Note 2)? What effect has the application of these procedures had on increasing the participation of handicapped students in vocational education?

While the results of impact evaluation should be useful to the internal staff for program planning and improvement functions, impact information also tends to capture the interest of people in positions who make judgments about whether to continue, expand, or certify a program (Anderson & Ball, 1978). In personnel preparation circles, these decision makers may be from university administration, state and federal funding agencies, or accreditation associations.

Two case examples of impact evaluation designs in vocational/special education personnel preparation projects are highlighted below.

Maryland Project

An interdisciplinary career/vocational education project conducted at the University of Maryland (Malouf et al., 1981) had two data collection points for evaluating project impact: (a) a three-month follow-up mail survey on "training outcomes, new professional activities, and impact on service delivery" (p. 12); and (b) a one-year follow-up telephone interview with former program participants. The questions asked of the graduates in the three-month mail survey are displayed in Figure 2. These questions appear to be of a general exploratory nature, which seems appropriate given the short time period since program completion.

Figure 2

Graduate Follow-Up Survey*

Career/Vocational Education for the Handicapped (CVEH)

1. Due to your participation in the CVEH program, have you changed some components of your classroom operation? Yes No

   Explanation:

2. Have you become involved in any other activities related to CVEH? Yes No

   If yes, please explain.

3. Are you in a new position? Yes No

   If yes, is this position related to CVEH?

   If yes, please explain.

4. Do you have any additional plans for this year related to CVEH? Yes No

   If yes, please explain.

5. Would you like a follow-up visit by a member of the CVEH staff?
   Yes No

   If yes, regarding:

6. Are you interested in further coursework in CVEH? Yes No

   If yes, on what topic(s)?

7. Are you interested in a position focusing on CVEH? Yes No

   If yes, what sort of position?

8. Are you planning to move? Yes No

   If yes, we would appreciate your new address so we can keep in contact with you.

9. Would you be willing to host a practicum student this Spring?
   Yes No

*From University of Maryland Career/Vocational Education Inservice Project, no date.

The one-year follow-up telephone interview guide developed by the Maryland project staff is shown in Figure 3. In contrast to the mail survey questions, the items in the telephone interview guide appear to be much sharper and more focused on the graduate's impact on the work environment. In conducting the telephone interviews, the Maryland project staff used separate guides for special educators and industrial arts/vocational education personnel. Malouf, the project director, provided a rationale for this decision (Note 1):

> The main thing I've learned about evaluation in this project is that the different training populations--special educators, vocational educators, industrial arts educators--are likely to react differently to many training experiences, and are likely to differ in terms of

the impact of training. Therefore, we try to provide for separate analysis of the evaluation data according to professional field, and to devise separate instruments as needed.

Figure 3

One Year Follow-Up Telephone Interview Guide*

Special Education Personnel

We would like to ask you some questions regarding our training sequence in Career/Vocational Education for the Handicapped. Please compare your present activities with your activities prior to enrolling in the training sequence.

1. Have you developed a more effective working relationship with the vocational education and/or the industrial arts personnel serving your students?

   a. Have you been able to involve them more effectively in the IEP process?

   b. Have you been including more career/vocational goals in IEPs?

   c. Are you communicating more information to industrial arts/vocational education teachers regarding the handicapped students they serve?

   d. Are these teachers providing you with suggestions for methods or activities you can use in your own teaching?

2. Have you changed any aspects of your direct services to handicapped students?

   a. Are you collecting assessment information on career/ vocational interests, aptitudes or independent living skills that you were not collecting before?

   b. Are you more effectively providing instruction in careers and employability skills?

   c. Are you more effectively preparing your students to function in IA and VE programs?

d. Do you feel that your students are being better prepared for employment?

3. Are you involved in the planning and development of new programs or services for the handicapped students?

4. Did the project contribute to any changes you made in the areas we just discussed? (If no, what contributed to the change?)

   a. Looking back, what experiences were most beneficial?

   b. What should be changed or omitted?

   c. What experiences should be added or expanded?

Other Comments:

*From University of Maryland Career/Vocational Education Inservice Project, no date.

Kansas Project

The second case example is the University of Kansas project (Skrtic et al., 1981) which was cited earlier in the process evaluation section. In the second stage of the project, following intensive training, the staff systematically observed the trainees as they functioned in new roles as inservice providers in their respective school districts. Evaluative data on the inservice delivered by the trainees were collected from the inservice participants and the project staff.

Since the inservice provider activities of the trainees were part of the Kansas project, this case example is not an actual impact evaluation. However, the naturalistic observation and data collection approach employed in this project is worthy of consideration for impact evaluation purposes. By being in the graduate's work setting, observing her/him "in action", and interviewing significant others (e.g., mainstream teachers, students), the evaluator could obtain an indepth and rich contextual understanding of program impact. He/she would be gathering first-hand information on the effects of the graduate on the workplace (and vice versa), while also getting a direct reading of the extent to which the program goals and expectations are "reality based".

Need for Impact Evaluations

Reports on the evaluation of program impact are, indeed, rare entities in the vocational/special education literature. Of those reviewed, most consisted of short term follow-up designs involving, for example, the collection of data from graduates within a year following program completion. Impact evaluations of a more longitudinal nature did not appear in our literature review. This is understandable though given the recency of the vocational/special education emphasis in teacher education circles and the complexities associated with conducting longer-term impact evaluations (e.g., substantial time and cost investment, competing program priorities, difficulty in establishing cause-effect relations over time). Nevertheless, both short and longer term studies of program impact have the potential for increasing our understanding of the relationship between specialized training and performance in the work setting. The inclusion and reporting of impact studies in vocational/special education personnel preparation programs are encouraged.

A Primary Consideration

The three-phase perspective of program evaluation presented in this paper provides a convenient framework for examining the various purposes and procedures of evaluation in the development and operation of a personnel preparation program. This framework should be helpful to the evaluator(s) and decision maker(s) of a vocational/special education program when considering the focus of an evaluation; that is, when taking into account the what, why, when, and how to questions of an evaluation. However, primary consideration needs to be given to ways of increasing the likelihood that the evaluation findings will be utilized by the key decision makers and information users of the evaluation. The importance of this impact consideration was emphasized by the Joint Committee on Standards for Educational Evaluation (1981):

> It is crucial to identify the audiences (involved in or affected by the evaluation), to rank order them, and within resource and time limitations to strive to ascertain and accommodate their information needs. If this is not done, the evaluation may be a misguided, academic exercise whose results are ignored, criticized, or resisted because they do not address anyone's particular questions. On the other hand, an evaluation planned and conducted to meet the informational needs of identified audiences is more likely to receive a positive response. (p. 21)

The Joint Committee suggested that the criteria for ranking audiences include: (a) expressed interest of each potential audience, and (b) their prospects for using the evaluation to influence or make decisions affecting the program.

The identification of key audiences and their information needs should go beyond the evaluation design stage. Priorities, concerns, and information

needs of these audiences are likely to shift as the evaluation unfolds. The evaluator should, therefore, be sensitive to this possibility throughout the evaluation. The Joint Committee on Evaluation Standards (1981) took this notion one step further by offering guidelines for the evaluator to actively "ensure that the members of the audience will assess and make constructive use of the results of an evaluation" (p. 47). These guidelines are:

1. Demonstrate to key audiences at the beginning of an evaluation how the findings might be useful for their work.

2. Arrange for the involvement of representatives of the audiences in determining the questions and planning and implementation procedures of the evaluation.

3. Be open, frank, and concrete in reporting to audiences and be available and willing to assist in clarifying the reports.

4. Periodically report interim results, noting especially how these may apply to roles performed by members of the audiences.

5. Assess the merits of plausible alternative courses of action and discuss those in the final report.

6. Supplement written reports with ongoing communication.

7. Within limits of time and resources, plan to help the audiences assess, interpret, and apply the findings beyond the time when the final report is submitted. (p. 47-48)

The procedures and guidelines suggested in the preceding paragraphs are ultimately intended to increase the utilization of evaluation findings. In discussing the research on utilization, Patton (1978) suggests that we not look for major changes to suddenly occur as a result of the evaluation. Instead, recognize that changes come slowly with "impacts in ripples, not waves" (p. 33). He summarizes this point with a sense of optimism about the potential of utilization-focused evaluation, while also recognizing its limits:

... utilization of evaluation research can be increased and more carefully targeted, but evaluation findings will seldom have the enormous kind of influence envisioned by social scientists who wanted to rationalize decision making processes. The potential for enhancing utilization lies less in its capability for rationalizing decision making than in its capacity to empower the users of evaluation information. (p. 35)

Parting Observation

From the experience of preparing this monograph, some parting thoughts are offered on one aspect of program evaluation that stands to benefit from closer examination in future professional forums.

The selection of exemplary program evaluation practices for inclusion in this publication was somewhat difficult. If exemplary is viewed as being an example, selected on the basis of representativeness and for its potential use by others in similar areas, then a number of exemplary practices are provided. However, a major problem encountered in selecting procedural examples and sample instruments was that the efficacy of the methods used in program evaluation was seldom examined or at least seldom reported by the authors. Selected authors did provide some reflection on their evaluation methods, but these were rare exceptions. Judging from the way in which many projects/programs were reported, it seems as though the methods selected and used were a "given" in the program evaluation effort. We submit that the importance and influence of the evaluation method employed in a project or program warrants closer professional scrutiny. Therefore, it is recommended that personnel involved in the evaluation of vocational/special education personnel preparation programs be more explicit in communicating the rationale behind the selection of particular methods used, the processes employed in developing the procedures and related instrumentation, and the relative efficiency and effectiveness of these methods in the context of the evaluation activity. This information could be very useful to colleagues who are in the process of mounting a program evaluation effort. Future authors of monographs on exemplary program evaluation practices in special/vocational education would also be indebted!

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